

ABSTRACT

[0193] A bistable structure provided by the invention is characterized as including a deflection element that has mechanically constrained end points and a compliant span between the end points that is substantially free to deflect between two stable positions when a force is applied at a point along the span. The deflection element span is provided, as-fabricated, curved in one of the two stable positions and in a mechanically unstressed condition along the length of the span. The as-fabricated curve of the deflection element span includes a curve maxima at a point along the span length that is at least about $\frac{1}{4}$ of the span length from the end points of the span. The deflection element span is constrained to substantially prohibit development of a second bending mode that is characteristic for the span as the element deflects between the two stable positions.